NEW ENGLAND FARMER.

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AGRICULTURE.

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EXTRACTED FOR THE NEW ENGLAND FARMER.

CULTIVATION OF SEA-KALE.

The *Crambe maritima*, or Sea-kail, is an indigenous plant of this and other countries of Europe, and found on the sandy beach of the sea coast. It has long been introduced into our g rdens, as a culinary vegetable, but it is only within the last thirty years, that it has been brought into general use, and subjected to a mode of cultivation, very different from that which was first bestowed upon it. The principal value of this plant, is its property of early growth; appearing at the table at a time when few such things can be had. It precedes asparagus, for which it is no bad substitute; and, as it makes a dish of itself, it gives a variety to the delicacies of the table; and if the opinions given of its medicinal virtues be correct, it is well worth cultivation; and the notice we are about to take of it, is describing an easy method of having it in great perfection throughout the winter months, and up to the time it may be gathered from the natural ground.

Prepare one or more beds [with alleys two feet wide between] for the reception of the seeds, in the following manner:—mark out the bed or beds two and a half feet wide, and of any required length, as near as can be from east to west; line off the sides and ends, driving a stake at each corner to ascertain the boundary; dig out the earth of the bed one spade deep, removing it to some distance; fill this excavation with the purest and finest sand which can be procured in the neighborhood, either from the sea shore, the bed of a river, or from a pit. It signifies nothing of what color it is, so it be pure, and as free from loam as it can be had; for in proportion as the soil of the bed is poor or rich, so will the flavor of the plant be when dressed. When this precaution is not taken, and when the plants are suffered to enjoy the rich and cultivated soil of a kitchen garden, or the situation made so, by rich dressings or coverings of fresh manure, the plants are stimulated into an unnatural luxuriance, which deteriorates the flavor, imparting to them that strong disagreeable scent and taste, resembling common cabbage, than which nothing can be a greater drawback on the value of the vegetable; but when grown entirely in pure sand, the flavor is mild and pleasant, and is relished by most palates.

When the bed is filled with sand, and raised therewith about six inches above the level of the ground, [and this should be done previous to the end of March, which is the sowing season,] draw a drill along the middle, from end to end, about three inches deep, in which drop the seeds pretty thickly, as they can be thinned out to the proper distance after they come up. If the sand or weather be dry at the time of sowing, give a little water in the drill and immediately cover up. If the seed be good, the plants will soon appear, and when they are advanced to a size large enough to enable the gardener to choose the most promising, let them be thinned out to the distance of six or seven inches, the distance at which they may remain. During the summer the bed should be occasionally watered with *dung water;* and this, for the purpose of encouraging the growth of the plants on their first setting off; and as manure given in this shape is more fugitive than when applied in a more solid or concentrated form, it cannot impart rankness to the plants when they arrive at that age fit to be brought to the table. The plants cannot be forced, nor should any of their shoots be cut the first winter after sowing; but should be suffered and assisted to establish themselves, and gain sufficient strength to yield adequate crops the succeeding years.

About the month of November, in the second winter after sowing, a part of one end of the bed should be prepared for forcing. For this purpose, and in order that it should be done with facility and effect, a rough wooden frame should be made eighteen inches high behind, and one foot high in front, shaped like a common hot bed frame, and of any convenient and portable length; and in width the same as the bed. Wooden covers should be fixed with hinges to the back; these may be raised at any time, for the admission of light and air, and in fine weather may be thrown entirely back. When the frames are placed, dig out the alleys one foot deep to receive linings of dung, which may be banked up against the back and front of the frame. The surface of the bed within the frame must be covered with soft, short straw, or hay, nine inches thick, to arrest the heat which rises from the linings, and form that warm humid region into which the shoots will advance. The temperature of these dark frames must be regulated by due attendance. In very cold, or frosty weather, the frames at night will require a covering of mats or litter.

The required supply of the family—the time for it, and the length and number of the frames, must be judged of by the gardener, and who will act accordingly; but two frames are indispensable; because the second should be considerably advanced by the time the crop in the first is all cut. Young plants may be transplanted; and if they are to be had, they may be tried; but the safer way is to sow and plant both, to prevent disappointment; and in order that the roots be not too much exhausted by forcing, one bed should be forced in one year, and another the next.

The crowns of the roots have a tendency to rise—and as annual additions of sand will be required after the autumnal dressing, the beds by these additions become unsightly; but cutting off the most aspiring, with its flowering stem, every summer, will keep the whole within bounds. Instead of covering with dung or litter, to protect from winter frosts, the frames may be set on those parts intended to be forced, to answer that purpose. The uncovered parts of the beds may receive a coat of mould out of the alleys, to be taken off the sand in the spring.

The writer of this article, began to force sea-kale as long ago as 1798, using hot dung within as well as without, a frame with glazed lights;—but soon found, that neither the glass nor dung *inside* was necessary or suitable. He afterwards succeeded by the above plan, to produce the finest crops of this vegetable, at any time in the winter, and can confidently recommend such management, especially to those who have no hot house or hot bed frames; because, when there is an early forcing house, or frames, if old roots are properly selected and potted in the autumn, and placed in such houses or frames, where there is sufficient heat, and well shut up from light by putting empty pots over them, a crop may be had in this way, without the trouble and expense of out-door forcing.

FOR THE NEW ENGLAND FARMER.

HORSES.

SIR,—In my first communication, for "are noble animals,—and" read "are noble animals: and;" a colon with no dash. The printer's accidentally cutting up an integral paragraph into three, has in some degree affected the sense of a large part of that communication: in my remarks upon the peculiar advantages and disadvantages of the thorough-bred horse, I did not intend to be understood that he never stumbled but in one way, or that he was liable to become unsound no where but in his foot; but that he was more apt than other horses to fall in a manner which I there described, more apt to catch behind, and rather more subject than other horses to foot-lameness: which last fact I ascribe to the peculiar manner in which this English variety of the A abian, has for a succession of generations been treated. However, for coach work, which is so much on the increase in Massachusetts, we should have horses capable of violent occasional exertion, and to breed them, let a man try what he pleases, he will always eventually look to blood. A single careless incroachment upon his powers, the coarse horse is somehow or other, ever afterwards the weaker for. My observation that the true Cleveland Bay is confined to the County of York, is not entirely correct, he having been always to be found in the bordering County of Durham. It is going rather too far, to assert that all a horse's diseases not arising from contagion, assume an inflammatory form, but it is very near the truth. I will now make a few remarks upon the question of foot-lameness.

The chronick lameness in one or both of their fore feet, and which never occurs in their hind ones, from which the superior orders of horses suffer more pain than from all other diseases put together, has given great occasion to inquiries and theories. It is rather remarkable, that most of the methods of accounting for it, have till of late years gone upon the ground of the deviation from nature of the form of hoof, which universally takes place, in some degree or other, when the horse is shod, and kept in the stable; and none of them upon that of the joints within the hoof being injured by the concussion and strains, to which they are exposed in fast work; and the disposition of all inflammation near a joint to be transferred to it. The sporting and the veterinary world both decided, that it usually proceeded from something wrong about the hoof, with which the internal foot, had no part of it originally any concern. They now go the other way, and assert that contraction of the hoof is generally consequent to internal disease. Foot-lameness should be a subject of some interest to the public, for it dooms a very large

proportion of our best horses to a life of comparative uselessness, and of excruciating misery.

1. They had a vague idea that it was connected with the horse's standing on litter in the stable. If this generally produced any real evil to the horse, it would be from the unnatural heat in the foot, and the dryness and consequent contraction of the horn occasioned by the absence of the dampness of the earth, the heat of the litter, and the increased heat of the foot within. The greatest objection to this explanation is that the contraction itself appears to be but slightly connected with the above causes, for the horse's hoofs, if he is kept shod, will contract nearly, or quite as fast, at grass as in the stable.

2. They then maintained that it probably arose from the frog's not receiving pressure, and that the very object of the frog was to prevent contraction by mechanical force. They shod the horse with a shoe lower at the heel than the toe, and with artificial frogs; broke down multitudes; found the hoof contract as much as before; and have at last, I believe, discarded the practice without reservation.

3. A distinguished master of the subject then ascribed it, and with vastly more appearance of reason, to shoeing the horse at all. It certainly would appear to be a tremendous trial of Nature's ability to accommodate herself to circumstances, to nail an iron ring round a living and elastic organ; and one, which as the wall of the hoof grows at the coronet, and is intended to be proportionably worn off by the earth, must be continually attempting to increase in size. Horses were never shod by the Greeks and Romans, with any thing but leather, or with shoes, which were tied on merely when the horse was at work: and nailing on shoes is still totally unknown in most parts of the world. The contraction arising from this fixed ring, tho' it may not ever be the immediately exciting cause of lameness, from the internal foot's in some degree adapting itself to its diminished area, I myself believe to be a great predisposer to it. That it cannot be the common cause, is evident from the fact that horses are never lame in their hind feet, be they ever so much contracted, and that the lameness itself is as often to be found in hoofs that are not perceptibly contracted at all, as in hoofs excessively contracted: which last fact I will demonstrate to any sceptical person, by examining the horses running in the coaches of any road in Massachusetts. I wonder that the very able defender of the theory of foot-lameness's arising from the modern system of shoeing, instead of explaining it by the crowding of the sensible foot, did not perceive that its far most dangerous action was, from the contracted area of the back part of the foot, and the increased concavity of the sole's interfering with the action of the very joint, the injury of which is now considered the most frequent cause of this dreadful disease.

4. They were finally compelled to own that contraction could not be the common cause; (so many horses being struck with it, who had been never shod before, upon their being first put to work, might have been conclusive evidence to the contrary,) and have now generally supposed it to be a disease, which may afflict a horse that is kept standing upon the earth all his life, and who is never shod, provided he is exposed to sprains and concussion. At the back of the coffin-bone, there is a small bone, placed horizontally across the foot, excepting that it is in the form of a crescent, exactly resembling a very small shuttle. It is called the shuttle-bone, or from its resemblance to the shape of a boat, the navicular-bone. The outer side of the crescent lies backwards and downwards, and has a ridge in the centre of its surface. It is articulated both with coronet-bone and with the coffin bone. Its especial office is to form an additional pulley for the back-sinew; which passes over its convex side, and is kept in its proper place upon it, by a groove corresponding to the ridge upon the bone. A bursa mucosa, or sac containing and secreting the sinovia or joint oil, is interposed between the back-sinew and the bone; no way differing, I take it, in office or liability to disease from the bursæ mucosæ in other parts of the horse's frame. All the weight which the horse throws upon the leg is of course received by the coronet-bone, which, being articulated with the coffin-bone, which when the hoof is placed upon the ground can have no motion but that allowed by the cartilages and the laminæ at its sides, sinks backwards and downwards, from its joint with the pastern bone, directly upon the navicular bone.—The navicular bone being articulated with the coffin-bone, which is nearly motionless, receives what weight is not thrown upon the coffin bone, and rolls backwards and downwards also upon the back sinew. The back sinew being fast immediately almost below, and being perfectly inelastic, if the navicular bone cannot roll upon it, the joint, if it may be called so, is destroyed. The weight is now transferred to the back-sinew, and is partly received by the muscles into which it is inserted above, and they share it with the elastic internal frog below the back-sinew, and the back part of the foot generally; all of which, if the horse has never been shod, is highly elastic. As this joint is the most perpendicularly opposed to the resistance of the earth of any joint in the horse's frame, and as all the elasticity of the back part of the foot, which Nature calculates upon, is neutralized by the iron, and in fact its area much diminished in general, disease of it would really seem to be very often expected in a shod horse, exposed to the concussion of fast work upon a hard road.—That it seldom or never occurs in the hind feet is natural, when we consider that the weight thrown upon them is comparatively trifling, and that the resistance of the earth is not opposed to it perpendicularly, but in a very oblique direction.—That foot-lameness generally arises immediately from concussion, is almost proved from its never occurring in the hind feet, which are also exposed to strains: and that it generally arises from disease of this joint is supported by the fact of this joint's being most exposed of any in the foot to concussion in the fore feet.

This joint, therefore, appears to be very much exposed to inflammation from direct injury, or if predisposed to it, it may appropriate to itself any general inflammation of the foot, from whatever cause. The first step of the disease is in the bursa mucosa, or sac, between the bone and the back-sinew; the second is a destruction of the smooth surface, and a caries of the bone; a consequent impediment to the roll of the bone upon the back-sinew; and in extreme cases, I take it, an ossified union of them together. There can be no doubt that in every step of the disease, the least motion of the foot, but particularly work upon the road, must occasion the horse a great degree of pain.—As this chronic lameness in their fore feet is almost unknown in some breeds and in some families of horses, and is distressingly common in others, and as we well know, that in mankind, not only are hereditary taints very apt to show themselves in the joints generally, but we have almost as an established fact that the generally carious teeth of civilized nations is in fact to be ascribed to a superinduced frequency in their ancestors, I must continue to believe that this disease, or a strong predisposition to it, is very often hereditary.

The only approach to a relief of this disease, that has yet been discovered, is the operation of neurotomy; or completely destroying all nervous communication between the foot and the brain. This entirely, of course, destroys the sensation of the foot; and enables the horse to go with considerable freedom till the nerves reunite; but it can have no effect upon the disease, but to facilitate its progress by making the horse use his foot more roughly than he would otherwise have done, and I cannot conceive how it is possible that any cure ever should be discovered for it, after it has passed the first stage and affected the surface of the bone. However, I should like to see the opinions of gentlemen of infinitely longer experience in horse flesh and more intimate acquaintance with the principles of anatomy and the resources of the surgical art. Yours, &c.

JOHN LANGDON ELWYN.

FOR THE NEW ENGLAND FARMER.

DISEASE IN HORSES.

Kennebunkport, March 11, 1828.

Mr. Fessenden,—Will you or some other gentleman, inform me (through your paper) which is the best method to be pursued, and the best mode of treatment for a horse that is severely purged. A neighbor of mine has had a very valuable horse sick with this disease for about six weeks—falls away very fast, and is afraid of losing him, unless some remedy can be applied to relieve him. The day previous to his being taken, he was fed with corn, and rode about twenty miles. When he is kept still in the stable for one or two days, he becomes apparently well; but as soon as he is rode, the complaint returns. An immediate attention to the above, will confer a favor.

Respectfully yours,
J. N. LANGDON.

FOR THE NEW ENGLAND FARMER.

GRAFTING.

Hampden, March 11, 1828.

Mr Fessenden,—I send you several samples of grafting by a process which I have not seen described, and therefore suppose may, possibly, be new to you.

I have had my grafting done in this way, for the last two years, by Mr. William T. Full from England, and am fully convinced of its superiority over all other methods I have ever seen. The stocks are not exposed to the admission of water to the pith, as in cleft grafting. The scion cannot be easily displaced, and is in no danger of being broken off by violent winds. The scion and stock come in contact at four distinct points, and the chances of success are increased almost to certainty. The healing process commences immediately, and, in nursery grafting, is entirely perfected in about six weeks.

The only points which occur to me as requiring particular attention are: that if in raising the

bark of the stock, a little wood should be taken up with the knife, it should be removed. The cleft in the scion should terminate immediately below a bud, for two reasons; the scion will be less disposed to split further, and, should it be broken off above the bandage, this bud will shoot and save the grafts. The bandage should be removed in about four weeks, or, as soon as the young shoots have extended to the length of three or four inches. Should this be neglected, the stricture will impede the circulation and eventually destroy the tree. I give you a small sample of the last spring's grafting, from which the ligature was not removed. It exhibits the healing process; and also, the consequences of neglecting to remove the bandage. Yours, &c.

J. HERRICK.

By the Editor. The kind of grafting mentioned above appears to be a species of what is called *Saddle Grafting*. The head of the stock is cut off obliquely by a stroke of the knife, the incision commencing on one side and ending on the other side, which forms the point of a wedge. The scion is then split, or divided in the middle, longitudinally, about two inches from its lower end, and each half thinned and tapered to a tongue shape. The scion is then placed on the stock, its split sides embracing the wedge, and their lower ends introduced between the bark and the wood of the stock. The samples, mentioned by Mr. Herrick may be seen at the N. E. Farmer Office, and will give a better idea and plainer exemplification of this mode of grafting than can be communicated by words.

Extracts from "Prince on Horticulture."

PEARS.

Early Green Chisel.—This is a green pear of middle size, very full of juice, and the finest flavoured pear of its season; it ripens about the end of July.

Jargonelle.—This is a fine fruit, ripening shortly after the preceding; it is of a green colour, with a little russet on the side next the sun, and has a long neck; it bears remarkably well, and is sent in large quantities to the New-York market. In France it is called Cuisse Madame.

Autumn Burgamot.—This pear is rather of a small size, but is one of the finest flavoured melting pears; it is in perfection in October.

Crasanne Bergamot.—This is an extremely fine fruit; the flesh is very tender, and full of delicious juice; it is one of the finest pears in eating from November to January.

Seckel.—This incomparable little pear, which is now becoming so widely disseminated in our country and abroad, originated on the farm of Mr. Seckel, about four miles from Philadelphia. It is at least equal to any European pear I have met with, and is by far the highest flavoured pear that has originated in this country. The fruit is of a russet colour, with a red cheek next the sun, and grows in clusters of from two to seven in each.—I have noticed, that much of its fine spicy flavour is contained in the skin, and in eating it this should not be taken off. It grows more slowly than any pear tree I am acquainted with—and, in fact, at maturity, forms a tree of only moderate size, but peculiarly compact and regular in its form. Although this pear has been figured in the Transactions of the Horticultural Society of London, and both European and American gentlemen conversant on the subject have stated, that no fruit similar to it existed in Europe, still there is a pear which has been long cultivated in France and England, and almost every other country in Europe, so *extremely similar* to it, that I venture to assert, that beyond all doubt, it is the *parent of the Seckel.* The pear to which I refer is the "Rousselet de Rheims, or Petit Rousselet," called also in Europe "*the Musk or Spice Pear.*" The growth of the respective trees is similar, and the fruit so much alike, that persons have mistaken them for each other. The difference consists in the part of the fruit next the stem being more pointed in one than the other, and in the spicy flavour of the Seckel being much higher than that of the Rousselet de Rheims. The colour and size are much the same.

Skinless.—A tree of strong growth and very productive; fruit of medium size, pyriform, green and yellow, with some touches of red; melting and high flavored; ripens in August.

French St. Germain.—This is a fine dark green melting pear, very juicy, and of delicious flavour; but the tree in some parts of the country does not produce well, and the fruit is apt to crack. They should be gathered in October, and laid singly on shelves, where they will continue to ripen in succession during the whole winter.

Prince's St. Germain.—This pear is a seedling of the French St. Germain, impregnated by the St. Michael, and was originated from seed by myself. It is of a larger size than either of its parents, of a yellowish green colour, with a red cheek. Its flavour is similar to that of the French St. Germain, but it has the advantage of always being a perfectly fair fruit, and a great bearer.—They should be gathered in October, and laid separately on shelves, where they will gradually ripen for several months. Next to the Seckel, I consider this as the finest table pear our country has ever yet produced.

Franchepanne.—A pear of medium size, and oblong, of a fine yellow colour; half melting, sweet and sugary—finely flavoured; ripens end of October.

Imperial Oak Leaved.—A spreading tree, with fruit of medium size, resembling the Virgouleuse, to which it is rather inferior in quality. The tree is remarkable for its luxuriant foliage, and the fruit matures during the winter months.

Boston Epergne.—This tree bears the characteristics of a native fruit, and without doubt originated in the vicinity of Boston, where it has acquired much celebrity. It bears well when at an age sufficiently mature, and the fruit is about the size and shape of the French St. Germain, and by some considered equal to that and the St. Michael in flavour. It is yellow on one side, and red on the other, and ripens near the same time as the St Michael. It is frequently called at Boston "L'Epergne," and has in consequence been supposed by many to be the French fruit of that name, until I detected the error, and explained it in my last Catalogue.

English Red Cheek.—This pear, cultivated at Rhode-Island under the above name, whence it was brought to Long-Island, is a bell shaped fruit, of a beautiful yellow colour, with a red cheek. It is not quite as large as the St. Michael or Virgalieu, but is considered a very fine fruit, and bears well; it ripens in September.

Rushmore's Bon Chretien.—This is a native pear of very large size, and one of the greatest bearers. The growth of the tree is particularly strong and rapid, and it soon arrives at mature bearing. When ripe it is a pale yellow, with a red cheek. The fruit is *breaking* when ripened on the tree, but becomes buttery when matured in the house. It is considered but a tolerable table fruit, but when this is taken in connexion with its being a most excellent pear for cooking, and ripe at a season when few other pears are so, and producing very abundantly, it may be considered as one of the most useful pears in a general view; it ripens in succession, from the end of August to the end of September.

Spanish Bon Chretien.—This is a good winter pear for baking or preserving; it is not so large as the common Pound Pear, but when ripe changes to a yellow, with a red cheek, which gives it a much finer appearance for a market fruit, and it is also more delicate, and possesses less of the roughness and astringency of the former; keeps till April and May.

Pound Pear.—This is one of the largest pears known, and on vigorous trees, in good soil, attains to an immense size. They are green, with a red cheek, when one side is exposed to the sun: they are good pears for baking or preserving, and become much better towards spring than when gathered from the tree; keeps till May.

Turkish Bon Chretien, or B. Turc.—This is the most beautiful of all the Bon Chretien pears, and the largest in size. It is also said to be superior to them in flavour, although it partakes of the general characters of that class.

Forty Ounces.—This is said to be the largest fruit of the pear kind known in France and the north of Europe; its principal use is for baking or preserving. A pear was exhibited in this vicinity, during the season of 1826, weighing 40½ oz. which was of the Bon Chretien family.

Red Flowering, or Sanguine d'Italie.—The blossoms of this pear are red, and o singular appearance; the fruit has within th resemblance of the Blood Peach, being marbled with red. It is a breaking pear, and esteemed as a curiosity.

Striped Dean.—A long pear, striped lengthwise white and green; it is a pleasant flavoured fruit, and a great curiosity; ripe in September.

Francreal.—A very large flat shaped pear, of a yellowish green colour, suitable for cooking from October to December.

Double Flowering.—This tree, in addition to its flowers forming a great ornament, produces also pears of a large size, proper for cooking; they are yellowish in color, and keep till February.

Bartlett.—This pear weighs about 10 oz. when at full size, shaped like a Bon Chretien, very yellow, and slightly tinged with red on one side; quite juicy, and by many considered a first-rate fruit. It is not, however, equal in flavour to the Seckel, or even to the Boston Epergne, but its size and beauty render it greatly admired. It much resembles in flavour and consistence the St. Michael, and is said to command a high price at market. It is no doubt a native, and appears to have originated in the vicinity of Boston; and it does not seem at all strange that many fine new pears should have originated there, as that city, and its environs, have for a long period been inhabited by a great many gentlemen extremely intelligent on the subject of Horticulture, who took much pains, at an early date, to introduce the choicest fruits, and particularly the finest varieties of pears, of which fruit they are skillful connoisseurs.

SCIENTIFIC AGRICULTURE.

An Address delivered before the Hampshire, Franklin, and Hampden Agricultural Society; at Northampton, Oct. 24, 1827. By EDWARD HITCHCOCK, Professor of Chemistry and Natural History in Amherst College.

[*Continued from page 277.*]

From this sketch, Gentlemen, it appears that the region of country embraced by this society, contains almost every variety of rock, and therefore a correspondent variety of soil. And since different vegetables require for their perfect developement, different soils; this circumstance must be regarded as highly propitious to the prosecution of experiments. Do you enquire for a soil resulting from the decomposition of granite? You have it in Williamsburgh, in Whately, in Belchertown, in Amherst and Leverett.—Do you need soils derived from the other primary rocks? You have them in nearly all the more elevated parts of the three counties. Do you wish for a soil whose base consists of disintegrated red sand stone? You have it in Gill, in Greenfield, in Deerfield, and in many other places. Does your experiment require what European writers denominate a basaltic soil? The eastern slope of the ridge, constituting Holyoke and Tom, furnishes an example nearly identical with this. Do you wish to compare the produce of land in the vicinity of the coal mines of Europe, with that of our own coal formation? Then you have only to perform your experiment in Granby, or South Hadley, in the eastern part of Longmeadow, or the western part of West Springfield. And as to soils of the tertiary and alluvial classes, you have a wide extent of the former in the plain extending from South Hadley through Springfield to Enfield; and in the plain between Northampton and Southwick: and what finer examples of the alluvial could you wish, than the rich meadows of Northfield, Deerfield, Hatfield, Springfield and Longmeadow?

But more than all this. Not only does the whole extent of these counties present so many varieties of soil, but in some instances a single township contains them nearly all. Northampton, for instance, has its fine alluvion on the east, and on the north and south, its tertiary. On the west we find granite and a granite soil. Along the western foot of Mount Tom, is the old red sandstone, with its peculiar soil: the mountain itself presents the basaltic variety; and along its eastern base, is the soil peculiar to the coal formation. A variety almost equally great, exists in Hatfield, Deerfield, Northfield, Montague, Amherst and Belchertown.

I am aware, indeed, that there is one variety of soil, and that not an unimportant one, which can hardly be said to have an existence along the Connecticut. I refer to what is called calcareous soil; or one proceeding from lime stone. Yet as a sort of substitute for this deficiency, I trust I shall be pardoned for alluding to the recent discovery of a variety of limestone along this river, capable of forming the water proof cement. It is interesting that this should be brought to light, just at the time when it seemed indispensable to the prosecution of a grand work of internal improvement, which, to say the least, will be to the western branch of the valley of the Connecticut, what that noble river is to the eastern. The discovery is interesting too, because, if I mistake not, the variety of limestone here employed, which is the bituminous, has never before been used for this purpose. And finally, I might remark, that such are the associations of this limestone, that we may expect to find it almost any where along this valley, between New Haven and Vermont.

But to return from this digression. I have now given a general view of those principles of Botany, Chemistry and Geology, that form the groundwork of the theory of agriculture. There are other sciences, however, that have a less intimate, though not unimportant connexion with the subject.

Almost every person, for example, has noticed how very great is the influence exerted over the growth and colour of plants by light. Here then we perceive a relation to the science of optics.

Gravitation also, is not without effect in giving direction to the roots and branches; though some other controlling power—perhaps an instinct—must be called in to explain all the phenomena.

It is well known how the produce of the soil varies with the state of the atmosphere, in respect to its weight, its moisture, its temperature, and purity. Hence we see how important a relation exists between agriculture and meteorology; tho' it must be confessed that this branch of knowledge is yet extremely deficient even in fundamental principles.

The effect of electricity upon vegetation is much more powerful than is generally supposed. Indeed vegetable life itself, may be only a modification of this power; and it is an ingenious suggestion of one of the ablest living philosophers, that those numerous chemical changes which are constantly going on in plants, may be the effect of galvanic or electrical action. But apart from Hypothesis, we have facts proving directly, that electricity acts as a powerful stimulant to vegetation. For grain in low lands, exposed to powerful storms of lightning, is thereby blighted: and in similar circumstances buck wheat fails to be productive.

But to dwell no longer upon the theory of agriculture; permit me, gentlemen, by way of application of that theory to practical husbandry, to make a few suggestions in regard to the mode of conducting agricultural experiments.

The frequent failure, and apparently opposite results of such experiments, are facts not to be denied. Indeed, so frequent have been instances of this kind, that many persons have lost all confidence in experiments, and regard this part of the business of agricultural societies as useless. But if there are any fixed principles on which agricultural processes depend, (and how can this be doubted, when we see the constancy of nature's operations in every thing else,) why ought we not to impute frequent failures in experiments, to the imperfect mode of conducting them; or to presume that the details are not given with sufficient minuteness, to enable us to judge whether they are, or are not, contradictory to others? Those conversant with philosophical and chemical experiments, know very well, that the most trivial and unthought of circumstance often entirely defeats them, or conducts to an unexpected result. Much more then, ought we to expect similar occurrences in agriculture, where the processes are a thousand times more complicated and delicate, and scarcely understood at all. Hence then, it is an important enquiry, what is the best mode of conducting experiments in husbandry.

The first suggestion I would make, is, that such experiments be prosecuted according to the established principles of philosophy. I know that many an agriculturist will feel that I am directing him to lean on a broken staff. But by philosophy I do not mean mere airy speculation; but established principles, drawn by induction from the most accurate and long continued experience.—I mean the laws that observation has discovered, by which the operations in the natural world are conducted. And shall the experimenter prefer his own limited and partial experience to the accurate and enlightened observations of the whole world? Or shall he pay a regard to the thousand groundless maxims and whims that are floating among the ignorant, and are alike repugnant to philosophy and common sense? It is to the observance of such unsupported fancies—the relics of superstitious and marvellous times—that we are to impute the failure of many experiments. For even in this enlightened land, many such notions sway the belief and control the practice of multitudes. What a mighty influence, for example, is imputed to the moon, in almost every operation of the farmer!—He cannot sow or reap; he cannot cut down his wood or his timber, or even kill an animal for food, until the moon has reached some particular point of her orbit. And even in the soap making process of the housewife, the moon has a most important part to perform, even if she be in the nadir. Surely, if this harmless planet has so much labor to perform in husbandry, she ought to be released from her cares as ruling among the stars of the evening; and instead of being called queen of the night, her title should be, queen of agriculture!

But to be serious: such notions are the lingering remnants of astrology: ill agreeing with the spirit of this age, and altogether opposed to sound philosophy and good sense. Every enlightened farmer, therefore, will disregard them, and a hundred others of a kindred character; permitting them all to join that chaotic company of phantoms, described by Milton:

> "All these, upwhirl'd aloft
> Flew o'er the backside of the world, far off
> Into a limbo, large and wide; since call'd
> The Paradise of fools—to few unknown
> Long after————"

The second suggestion I have to make, in regard to agricultural experiments, is, that every circumstance which can mediately or immediately affect the result, should be carefully observed and recorded. The remark of a French philosopher, that "real and general advances will then only be made in the science of nature, when the dread of prolixity shall be overcome," may be pertinently applied to agriculture. The most trivial circumstance often reverses the result of an experiment: nor can we tell beforehand, so little do we know how to calculate the complicated operations of the vegetable world, what that circumstance may be; and often it finally eludes our search. Therefore, we must record every thing that can have any bearing upon the result; and thus shall we, in most instances, avoid the difficulty. But if the experimenter, after reasoning upon the subject, concludes this or that circumstance to be too trivial to be noticed, he will not unlikely, mislead himself and others in his conclusions. For in subjects of this kind, the philosophy of experience, and the philosophy of reason, are often at variance.

One very important circumstance in all experiments upon the produce of land, is the nature of the soil. Perfect definiteness, however, in the description of soils, is not attainable; because they

pass into one another insensibly. The rules adopted by Sir H. Davy on this subject, will, nevertheless, furnish us with convenient landmarks. "The term sandy soil," says he, "should never be applied to any soil that does not contain at least 7 8 of sand. Sandy soils that effervesce with acids, should be distinguished by the name of calcareous sandy soils, to distinguish them from those that are siliceous. The term clayey soil, should not be applied to any land which contains less than 1-6 of impalpable earthy matter, not considerably effervescing with acids. The word loam should be limited to soils containing at least one third of impalpable earthy matters, copiously effervescing with acids. A soil to be considered as peaty, ought to contain at least one-half of vegetable matter."

Suppose the experiment relate to the application of manures. To judge of their effect, we should know the nature of the soil; the season of the year in which they were applied; the state of the weather at the time; whether wet or dry; cold, or warm; clear, or cloudy; whether decomposition is just begun, or has proceeded far; whether spread uniformly over the surface, or otherwise: whether ploughed in immediately, or not; and the state of the weather subsequently.

In the paring and burning of lands—processes but seldom attempted among us—the character of the soil is a circumstance of prime importance; whether recently brought under cultivation—whether sandy, clayey, mossy, or peaty; whether naturally wet and cold, or warm and dry; whether drained previously to the operation: the state of the weather at the time, and subsequently, &c. Similar particulars should be noticed in fallowing.

Suppose the process to be transplanting. Most obviously a minute account of the soil whence the plant was taken, and of that into which it is introduced, is requisite. Also the state of the weather; the relative situation of the plant, in regard to the meridian; its subsequent treatment, and the like. In engrafting and innoculating, besides the state of the weather, and the mode of performing the operation, we should state the age of the stock, and of the tree from which the scion or bud is taken.

In irrigation, not only the nature of the soil to be watered, and its previous state should be given, but also the character of the water brought over it; whether from a river, or a pond; a lake, or the ocean; and the character of the rocks and soils in their beds.

But not to dwell upon particular cases; I remark that there are certain circumstances of a collateral and more general character, that seem necessary to be made known, to enable us to judge correctly of an agricultural experiment. The most important of these relate to the state of the wind, the weather, and the temperature through the season. So important is the bearing of these circumstances upon the vegetable kingdom, that it is impossible we should rightly estimate the result of an experiment upon the productions of the soil, unless a meteorological journal, more or less perfect, accompany the result. One register of this kind might generally serve for a town; and how great would be the benefits of keeping one in each town, not merely to the interests of agriculture, but also to those of science! And since the state of the weather is a subject so deeply interesting to every class of the community, would it not be easily practicable, to obtain in every town, the means of observation, and an individual to whom the keeping of the journal would be a pleasure. In the innumerable discussions that take place, every where, concerning the weather, how very satisfactory it must be, to be able to appeal to some fixed standard, by which one day, one week, one month, or one season, might be compared with another. This would be substituting facts for vague conjecture; and would tend, more than almost any thing else, to convince men that neither the moon, nor comets, nor shooting stars, nor eclipses, are the principal causes of change in the weather.

(Concluded next week.)

SWAMP MUCK, SUGAR BEET, &c.

[Extract of a letter from a correspondent in Catskill, N. Y. to the Editor of the New England Farmer.]

Sir,—I was much pleased with the remarks of a brother yankee, at the east, on the subject of swamp muck as a manure, in the 30th No. page 238, of the present volume of the N. E. Farmer. I am inclined to think that the muck he alluded to, is different from the muck in these parts. That which is obtained in swamps here, when removed to upland, becomes dry and crumbles fine. From a small trial of its utility five years since, I have found from that time to this, that its effects were visible in the improvement of grass. The muck was put on the top of a hill, (composed of yellow loam) in the fall previous to sowing a crop of winter rye. The following summer it was evident at a distance where the muck was spread, by the fertility of the crop. This experiment gave entire satisfaction, which led me to feel that my farm had within itself a competency to fertilize every part, when the different parts were applied on each other. The muck, spread on upland, either before a crop of grain or grass in the fall, and the loam, spread on the low land, I have supposed were valuable manures, though capable of much improvement by addition of lime, ashes, or mixing with barn-yard manure. I had intended to have made a more thorough trial of it, but a variety of causes have prevented. This season I intend to make such trials as to be able to give a more full account of it in future.

With regard to the sugar beet, I am fully of the opinion of Mr. Prince, "that it is a more valuable root than the mangel wurtzel." 1st. As to its nutritive qualities, it is altogether before the mangel wurtzel, for stock. 2d. It is fully equal in quantity as a crop only. For winter use, it is much less liable to decay. I was pleased with Mr. Prince's remarks on the sugar beet, as I know them to be correct from experience. W. H.

CLIMATE.

The climates of several countries are known to change. In England, the climates have become temperate; and in Charleston, [S. C] it is otherwise—the sweet orange was once a common inhabitant near Charleston; the climate becoming colder, the orange has removed farther south, except the very sheltered situations. The precise degree of cold that the sweet orange tree will bear, is not known—perhaps not much below 30 degrees, if of long continuance; the sour orange is more hardy, and the citron and lime are less so. The coffee tree, probably, will not bear a degree of cold equal to 41, which produced white frost. The plant delights in a hilly country, a level rich soil causes it to run much into suckers, and the seeds are of a bad quality, as has been proved in English Napalina, in the island of Trinidad, where the planters neglected it, and destroyed the plantations before 1798. The olive tree perfects its fruit as far north as the Duchy of Milan. The city of Milan is in lat. 45, 28 north, the medium cold temperature of its climate is not known.—This is the coldest climate in which the olive tree is cultivated in Europe. It is not understood in what degree of cold the plant will bear; perhaps no greater than 17 degrees, at which the sap of the tree begins to congeal. The olive would be valuable in Georgia; the young plants should be imported by the government, as it would be too extensive for private adventure. The seeds will not germinate until they have passed through the digestive process in the stomach of the turkey—which divests them of their oil, and fits them for production. It is said that by mashing the skin and flesh of the fruit, and digesting them in a solution of alkali, answers the purpose. The greater palm, or date tree, the fruit of which is greatly valued as food for man in northern Africa, Arabia and Persia, would probably answer a similar purpose in most parts of Georgia; but we have no information of the degree of cold it will bear.—The sugar cane perfects its saccharine maturity in Georgia as far north as Milledgeville, in lat. 33, and perhaps further. The season for manufacturing the sugar is so short, that it has not been attempted as a crop, except on the sea board. In the West Indies, the saccharine maturity of the sugar cane is perfected by the long season of dry weather; in Louisiana, Florida, and Georgia, it is perfected by the cold weather of autumn and winter; when the cold is enough to freeze the cane, it renders the juice unfit to make sugar or syrup. The shea tree, from which the Africans obtain an excellent butter, as we are informed by Barke, and by the Africans themselves, would probably be valuable in some of our warmer climates. If some of our national ships would procure, when on that coast, a few of the plants of shea-butter tree, it would be pleasant to our industrious house wives to have an annual crop of butter from the orchard of fruit trees.

(From the New York Farmer.)

Sir.—In your paper of the 17th inst. I noticed a communication from Mr. Floy, relative to certain remarks contained in my publication, touching synonyms in fruits, part of which he supposes is an oblique hit at him; and he seeks to show that he has not committed the supposed error. I have only to say, that my remarks were general, and I was not previously aware that he was the person who had given the name referred to. As Mr. F. seems to accord with me, as to the impropriety of re-christening fruit, I accede that if his new variety is distinct, he had a right to give it any name he thought proper. I have not seen differences, which I deem sufficient for that purpose, and have found others of the same opinion. It appears the investigations of the Horticultural Society of London have caused them to come to the same conclusion; for by reference to their catalogue of 1826, it will be seen that they have arranged the Emperor of Russia, (the serrated, and the unique) as synonyms for the same peach. It now rests with the public, to test their qualities, and decide whether they are sufficiently distinct to be called by different names. WM. PRINCE.

NEW ENGLAND FARMER.

BOSTON, FRIDAY, MARCH 28, 1828.

POTATO.

Sir Joseph Banks *(Hort. Trans.* 1, 8,) considers that the potato was brought to Spain from the mountainous parts of South America, in the neighborhood of Quito. To England, however, this root found its way by a different route, being brought from Virginia by the colonists sent out by Sir Walter Raleigh, in 1586.

Varieties. These are very numerous, not only from the facility of procuring new sorts by raising them from seed, but because any variety cultivated for a few years, in the same soil and situation, as in the same garden or farm, acquires a peculiarity of character and habit, which distinguishes it from the same variety in a different soil and situation. Dr. Hunter, in his *Georgical Essays*, has supposed the duration of a variety is limited to fourteen years; and Knight concurs with him in opinion. Potatos, which are excellent in Ireland, Nova Scotia, and other high northern latitudes, do not answer a good purpose in New England. The potato taken from the South, prospers better, such as the River Plate, or red potato—which has succeeded well in Massachusetts. Loudon asserts that the best mode to order potatos for seed, is, to give a general description of the size, color, form, and quality wanted, and whether for an early or late crop, without being guided by the names attached to any varieties.

Propagation. The potato may be propagated from seed, cuttings, or layers of the green shoots, sprouts from the eyes of the tubers, [roots] or portions of the tubers containing a bud or eye, or by planting the tubers whole. The object of the first method, is to procure a new or improved variety; of the second, little more than curiosity, or to multiply as quickly as possible a rare sort; and of the third, to save the tubers for food. The methods by portions of the tubers, [the roots cut in pieces] or whole potatos, is the best, and almost universally practised, for the general purposes of field and garden culture.

By seed.—"Take the apples in the beginning of October, [or whenever they are ripe] before the frost has hurt them, hang them up by the foot stalks in a dry closet, where they will not freeze; let them hang till March, or April; then mash the apples, wash the seeds from the pulp, and dry them in a sunny window. Sow the seeds in a bed about the first of May. When the plants are four or five inches high, transplant them into ground well prepared, one or two plants in a hill."*(Dean)* Seeds from the same ball will produce a great variety of kinds, some of which may be of little value; and in order to make the most of such experiments, it will be well to proceed according to the following directions, extracted from some remarks by Col. Pickering, contained in a pamphlet published by the Essex Agricultural Society; this Society having awarded premiums for the best potatos raised from the seed.

1 "Seeing the seeds in the same ball will produce various sorts of potatos, it will be indispensably necessary, that each young plant grows at the distance of eight or ten inches apart.

2 "In autumn, or as soon as the vines, or stems of the plants die, and the young potatos are dug up, those of each plant are to be saved by themselves, and it will be easy to put each sort in a separate paper bag. Those potatos will be very small, perhaps from the size of a pigeon's down to a sparrow's egg.

3 "In the ensuing spring, the potatos of each sort, that is, the potatos of each bag, must be planted by themselves; and if not in distinct rows, then stakes driven into the ground, should mark the divisions of the several sorts in the same rows, leaving a space of about two feet between one sort and another, to guard against any mixture.

4 "In the time for harvesting them in the second year, the potatos, [if grown in a good soil] will be large enough to be boiled to ascertain their quality. Each sort must be tried by itself. Such as are watery, and ill flavored, may be at once thrown aside, for the use of live stock. Every other sort, so valuable as to be thought worth cultivating, must be kept unmixed, by putting each kind in a separate bag or cask."

The modes of propagating by layers, cuttings, suckers, sprouts, &c. are rather curious than useful, and are therefore here omitted, but may be seen in detail in the Encyc. of Gard. page 620.

By portions of the tubers, [or cuttings of the potato]. "In making the sets or sections, reject the extreme or watery end of the tuber, as apt to run too much to haulm, [vine] and having the eyes small, and in a cluster; reject also the root, or dry end, as more likely to be tardy in growth, and produce the curl. Then divide the middle of the potato, so as to have not more than one good eye in each set. When the potato-scoop, [an instrument for digging out the eye of potatos] is used, take care to apply it so as the eye or bud may be in the centre of each set, which this instrument produces, of a semi-globular form. The larger the portion of tuber left to each eye, so much the greater will be the progress of the young plants."

By some experiments which were made by J. Whitlaw, Esq. and given in detail, in the N. E. Farmer, Vol. i, page 53, and Vol. iv. page 314—these two important facts were made apparent: 1st. Large potatos are much better for seed than small ones. 2d. It is best to cut off the butt and top ends from each potato, and cut the middle pieces into quarters, before planting. Knight, the famous English horticulturist, has found that for a late crop small *sets* [seed potatos] may be used; because the plants of the late varieties always acquire considerable age before they begin to generate tubers; but for an early crop, he recommends the largest tubers; and he has found that these not only afford very strong plants, but also such as readily recover when injured by frost; for, being fed by a copious reservoir beneath the soil, a re-production of vigorous stems and foliage soon takes place, when those first produced are destroyed by frost or other cause. He adds, "when the planter is anxious to obtain a crop within the least possible time, he will find the position in which the tubers are placed to vegetate, by no means a point of indifference; for these being shoots or branches, which have grown thick instead of elongating, retain the disposition of branches to propel the sap to their leading buds, or points most distant from the stems of the plants of which they once formed parts. If the tubers be placed with their leading buds upwards, a few very strong and very early shoots will spring from them; but if their position be reversed, many weaker and later shoots will be produced; and not only the earliness, but the quality of the produce, in size, will be much affected."

M'Mahon advises to cut seed potatos "a week before planting, in order that the wounds should have time to form a dry crust; for if planted immediately after being cut, they imbibe too much moisture, many of them rot, and the rest are greatly weakened thereby." Some advise to wet seed potatos, and roll them in pulverized plaster of Paris, immediately before planting.

From an experiment made by a person in the employ of the Hon. Josiah Quincy, the particulars of which are given in Mass. Agr. Repos. Vol. v. p. 64, it appears that the product of certain rows, planted with *whole* potatos, exceeded an equal extent of adjoining rows *more than one third.* A writer for the N. E. Farmer Vol. i, p. 330, gives an experiment, which tends to the conclusion that potatos, planted whole produce more than those which are cut. The experiments of most cultivators, however, are in favor of cutting. Dr. Cooper in the last Philadelphia edition of Willich's Domestic Encyclopedia, says, "The best mode [with regard to seed potatos,] appears to be this; choose your potatos for planting of a moderate size rather large than small, for there is no good reason to be assigned for breeding from diminutive parents, cut your potatos into sets, two eyes to a set; throw away without hesitation into the hog trough all the inferior and diminutive eyes, choosing your sets from the middle of the potato, do not cut the potato down the middle. Loudon observes "In preparing the sets of potatos some cultivators recommend large sets, other small potatos entire. Others, on the ground of experience are equally strenuous in support of small cuttings, sprouts, shoots, or even only the eyes or buds. With all these different sorts of sets, good crops are stated to have been raised, though tolerable sized cuttings of pretty large potatos, with two or three good eyes or buds in each, are probably to be preferred. A very slight exercise of common sense might have saved the advocates of shoots, scooped out eyes, &c. their experiments, and arguments; it being evident, as Brown has observed, to every one that has any practical knowledge of the nature of vegetables that the strength of the stem in the outset, depends in direct proportion upon the vigor and power of the set. The set, therefore, ought to be large, rarely smaller than the fourth part of the potato; and if the root is of small size, one half of the potato may be profitably used. At all events, rather err in giving over large sets, than in making them too small; because, by the first error, no great loss can be sustained; whereas, by the other, a feeble and late crop may be the consequence." Dean says, "the shooting parts exist in a potato, in the form of a tree, of which the stock is at the butt or root end. I therefore take care to cut athwart those parts as little as possible; though they will grow any way, the greater length of shooting stem there is in a set, the more strong and vigorous will be its growth at first."

Quantity of sets. Abercrombie directs, "for a plot of the *early* and *secondary crops*, eight feet wide by sixteen in length, planted in rows, fifteen inches asunder by nine inches in the row, a quarter of a peck of roots or cuttings. *For full timed and main crops*, a compartment, twelve feet wide by thirty-two in lengh, planted in rows, two feet distant, half a peck. For field cultivation, English writers say that it requires twenty bushels and a half to plant an acre with cut potatos; and thirty seven bushels and a quarter of whole potatos.

(To be continued.)

To CORRESPONDENTS.—*A communication from Worcester, on Bees; Likewise, Communications on Seeds—Insectiverous Birds—on Salsafy, or Vegetable Oyster—on Tart Rhubarb—on Gourds—on the Prolific, or Tree Onion, and on the Lime Plant, will soon appear, from the pen of a respected correspondent.*

Horse Wanted.

A gentleman who is located in a section of Massachusetts where there are many desirous of raising colts, wishes to hire for the season, a half blood or good formed Stallion, or if the owner prefer, would board the horse (and a groom if desired) at a very low rate.—Enquire at this office. march 28.

SUPERB BULBOUS ROOTS.

Just received at the New England Farmer Seed Establishment, a fine collection of superior Bulbous Roots, suitable for spring planting. Consisting of black, purple, orange, violet, crimson, rose, nankeen, bronze, and white colored DOUBLE MEXICAN DAHLIAS. Also, Ferraria Tigrida, or Mexican Tiger Flower—Amaryllis Formosissima, or Jacobean Lily—Double Tuberose, and Ranunculus; paintings of which may be seen at this place. The above collection of Bulbs is in fine order, and is from the same House from which we obtained the Bulbous Roots last autumn, which gave such uncommon satisfaction.

☞ Just received direct from Glasgow, Scotland, a large collection of SCOTCH GOOSEBERRY BUSHES, of the largest and finest fruit, done up in bundles of six roots each with the name marked—price $1.50 per bundle. Specimens of the fruit, preserved, measuring four inches in circumference, may be seen at this place.

☞ A supply of the Roots of "WILMOT'S SUPERB STRAWBERRY"—measuring six and eight inches in circumference, is daily expected from Europe.

☞ At this place is kept a large variety of Ornamental Flower Seeds, (of 300 different sorts) in papers of 6 cents each, or $5 per hundred, assorted; the names of which it is of course impracticable to give here. The collection comprises many French sorts, and the new ones introduced by Nuttall, from Missouri, and the Rocky Mountains.

A few barrels of superior Early Manly Potatos, have been received. This is the same sort as those sold at this place last year, which gave universal satisfaction, as to uncommon earliness, and good quality.

N. DAVENPORT offers for sale at his Nursery in Milton, a fine collection of Fruit and Forest Trees, and Ornamental Shrubs, comprising Apples, Pears Peaches, Prunes, Nectarines, &c. Gooseberry and Currant Bushes. A list of which can be seen at the office of the New England Farmer, or Agricultural Warehouse—and will be inserted in the New England Farmer occasionally. At this Nursery, however, it is not so much an object to present the imposing display of a great number of the names of indifferent fruit as to keep a choice collection of those sorts, whose excellence is well known and established.

☞ Orders are respectfully solicited, and will receive prompt attention if left with J. R. NEWELL, at the Agricultural Establishment, No 52 North Market street; or with FRENCH & DAVENFORT, No. 713 Washington Street—or at the Nursery in Milton. Feb. 29.

Landreth's Nurseries—Near Philadelphia.

From the patronage already extended this Establishment, by the citizens of Boston and its vicinity, the Proprietors are again induced to advertise to them their Nurseries, as offering peculiar facilities for the acquirements of useful & ornamental vegetable productions. The collection now cultivated by them, consists of an immense variety of Fruit and Hardy Ornamental Trees and Shrubs—Green-house Plants—Bulbous Roots, and Garden Seeds. The assortment of Fruits is not surpassed in real value by any in this country. It embraces most of the celebrated kinds of Europe, with all the esteemed varieties which have originated on this continent. The utmost care has been observed in making the selection, and the whole is now offered as containing none but those most worthy of cultivation. Persons not acquainted with the different varieties by name, and desirous to procure choice kinds, by merely stating the time they wish them to ripen, may confidently refer the rest to the proprietors, without a fear of disappointment.

The Ornamental department is rich in native and exotic Plants—it contains a splendid collection of Green house Plants, most of which are calculated for adorning in the winter seasons, parlours, sitting rooms, &c. with an assortment of Hardy Flowering Shrubs, and acquisitions are continually making.

In the portion of ground allotted to Garden Seeds are grown almost every variety of Esculent Vegetables for seeding. The method pursued by the Proprietors in this branch, certainly must obtain for them a preference withs all who will consider the subject in the slightest degree. The preparation of those kinds liable to mix in seeding—in short, the whole process of cultivation, in gathering, &c. all being under their own personal superintendence undoubtedly conspires in an eminent degree, to obviate the errors and impositions, unavoidable in a dependence on foreign importations, or on careless or inexperienced growers at home. Orders received by Parker & Codman, No. 31 Congress St. Boston, of whom priced catalogues of the whole may be had gratis. Persons ordering, may be assured of having every article well and safely packed and forwarded.

Feb. 15. tf D. & C. LANDRETH.

Farmer Wanted.

A young farmer with his wife, is wanted, to take charge of a farm about 10 miles from New Haven. A young Massachusetts farmer who thoroughly understands his business, and whose wife is acquainted with the management of a dairy, and who can furnish testimony of economy, neatness, and industry, will have an opportunity to make a permanent and advantageous bargain. Inquire at the New England Farmer Office.

New York, March 28, 1828.

Isabella Grape.

Vines of the ISABELLA GRAPE may be had, on application to the Subscriber, in Dorchester, or at his office, 7 1 2 Congress Street. ZEB. COOK, JR.

Wanted as above, a first rate Gardener, who can produce satisfactory recommendations. 3t March 21

Milk Carriage.

For sale, a new Milk Carriage—inquire of Walter Frost, No 18 Common street, Boston. March 21

JAMES BLOODGOOD & Co's.

Nursery, at Flushing, on Long Island, near New York.

IN behalf of the Proprietors of the above Nursery, the subscriber solicits the orders of Horticulturists who may be desirous of stocking their gardens and fields with Fruit Trees of the finest sorts, and most healthy and vigorous stocks the present reason.

BLOODGOOD & Co. *attend personally to the Inoculating and Engrafting of all their Fruit Trees*—and purchasers may rely with confidence, that the Trees they order will prove genuine. The subscriber, Agent of the above Nursery, will receive orders for any quantity of

FRUIT AND FOREST TREES,
FLOWERING SHRUBS,
AND
PLANTS.

The Trees will be delivered in this City, at the risk and expense of the purchaser—the bills may be paid to him.

The reputation of this Nursery is so extensively known, and has been so well sustained, that I take leave to refer those in want of Trees, to any of the Horticulturists in this City and its vicinity; and if ocular demonstration is desired, I invite those who wish to be thus satisfied, to examine the Trees in my garden at Dorchester, procured from this Nursery for three or four years past, some of which are now in bearing, all in a healthy and vigorous state.

☞ Catalogues will be delivered gratis, on application to ZEB. COOK, Jr. Rogers' Buildings—Congress St.

Rose Bushes and Grape Vines.

For sale at the House of SAMUEL DOWNER, in Dorchester, 80 hundred leaf Rose bushes—90 do. Province, or Cabbage 10 do. four seasons—300 do. Damask—30 do. Burgundy—5 do. Austrian—25 do. Marble—10 do. Tuscany—100 do. French—6 very large pots monthly Roses, sixteen years old, and in prime health—7 varieties Double Dahlias—Single, do.—8 Lagerstoemia Indica, or Crape Myrtle, two of which are 20 years old—200 Grape Vines, (White Sweet water)—Snow ball Bushes—White Lilies—Red and White Lilacs.

ROSE WATER.

20 Demijohns Double and Single distilled Rose Water, made entirely from Damask Roses. The above Rose Water is constantly kept for sale at Mr. C. Wade's Porter Cellar, No. 12 Merchant's Row, by Demijohn or less quantity.

6t March 14

Greenwich Garden.

Carmine & Varick streets, not 5 minutes walk from St. Thomas Church, Broadway, along Houston street.

D. KENNEY, Proprietor of this Establishment, grateful for past favors, and the liberal encouragement he has experienced for a number of years, begs leave to inform his friends and the public, that he has received his subannual importation of Bulbous Flower roots—Garden Seeds—Fruit Trees, &c. of every description; all of which are in excellent preservation, and will be sold on the most reasonable terms. The importations are from the first firms in England, France, and Holland, and are warranted to be good and genuine, and no doubt will give general satisfaction, to the Agriculturist, Horticulturist, and Florist. A choice collection of Green house Plants—also hardy Herbaceous Plants, many of which are very rare and scarce. Also, a choice collection of Rose Bushes, many of which, originally raised from seed by him; are new, and not in any other collection, for which a premium has been awarded by the New York Horticultural Society. Other Shrubs and Trees, in great abundance. The Hyacinths, Narcissus, Crocus, &c. are now in bloom, will continue in succession the greatest part of the year; and will be well worthy a visit to the Garden and Green-house, by any lady or gentleman in or near the city.

☞ Bouquets furnished. Grape Vines, Trees, and Shrubs pruned or trained, at the shortest notice. Asparagus Plants of the first quality. Catalogues may be had at the Garden gratis. Orders from any part of the Union will be strictly attended to. Gentlemen supplied with experienced Gardeners. Likewise, situations got for Gardeners of industrious, sober habits, and that perfectly undrstand their business, none other need apply.

New York, March 14.

Gunpowder, &c.

Du Pont's Gun Powder, at 23 to 50 cts. per pound—Shot—Balls—Flints and Percussion Caps.

Also, Alum—Refined Salt Petre—Blue Vitriol, &c. constantly for sale at the *Dupont Powder Store*, No. 65 Broad street—By E. COPELAND, Jr.

☞ The Du Pont sold as above, is warranted first quality—and is marked "*E. Copeland, jr. Boston,*" on the head of the cask. tf March 14

Fruit and Ornamental Trees.

The KENRICK NURSERIES in Newton, near Brighton, are the most extensive in New England. Gentlemen in want of Trees, are invited to call—examine for themselves—and, make their own selections. The Apple and Peach Trees are extraordinary for size, variety, and thriftiness.

Written orders addressed to JOHN or WM. KENRICK, and sent to the Newton Post office, or left with Joseph Bridge, agent, in Court-street; where Catalogues may be had gratis—will be carefully attended to. Trees will be suitably packed for shipping or land conveyance, and delivered in Boston when desired. Gentlemen living at a distance, however, should have agents in the city to receive and pay for them. Mar. 14

Garden Seeds.

The subscriber has for sale a very large assortment of fresh and genuine Garden Seeds, from the New England Farmer Seed Establishment, Boston.

Likewise, a few pounds Lucerne Seed.

Newburyport, March 21. E. STEDMAN.

40,000.

For sale, Forty Thousand engrafted APPLE TREES, from two to four years from the graft—consisting of forty-three kinds of the most approved and superior Fruits; including early autumn and winter Apples. Also, other Fruit and Ornamental Trees. Orders may be sent to this place via Post office, directed to FRANCIS WINSHIP.

Brighton, March 21st, 1828.

PRICES OF COUNTRY PRODUCE.

			FROM	TO
APPLES, best,		barrel.	2 00	3 00
ASHES, pot, first sort,		ton.	107 50	110 00
Pearl, first sort,		"	112 00	115 00
BEANS, white,		bushel.	1 25	1 75
BEEF, mess, new,		barrel.	9 75	10 00
Cargo, No. 1, new,		"	8 50	9 00
Cargo, No. 2, new,		"		7 50
BUTTER, inspected No. 1, new,		pound.	12	16
CHEESE, new milk,		"	7	10
Skimmed milk,		"	3	7
FLOUR, Baltimore, Howard-street,		barrel.	5 75	5 80
Genesee,		"	5 75	6 00
Rye, best,		"	3 00	3 25
GRAIN, Corn,		bushel.	53	55
Rye,		"		57
Barley,		"	60	67
Oats,		"	31	34
HOG'S LARD, first sort, new,		pound.		10
LIME,		cask.	70	1 00
PLAISTER PARIS retails at		ton.	2 75	3 00
PORK, new, clear,		barrel.	17 00	18 00
Navy, mess, new,		"	12 50	13 00
Cargo, No. 1, new,		"	12 50	13 00
SEEDS, Herd's Grass,		bushel.	1 50	1 75
Orchard Grass,		"		4 00
Fowl Meadow,		"		4 00
Rye Grass,		"		4 00
Tall Meadow Oats Grass,		"		5 00
Red Top		"		1 00
Lucerne,		pound.		50
White Honeysuckle Clover,		"		50
Red Clover,		"	12	13
French Sugar Beet,		"		1 50
Mangel Wurtzel,		"		1 50
WOOL, Merino, full blood, washed,		pound.	33	55
Merino, full blood, unwashed,		"	20	25
Merino, three fourths washed,		"	28	34
Merino, half & quarter washed		"	28	30
Native, washed,		"	22	27
Pulled, Lamb's, first sort,		"	40	45
Pulled, Lamb's, second sort,		"	30	35
Pulled, for spinning, first sort,		"	30	35

PROVISION MARKET.

BEEF, best pieces,	pound.	9	12
PORK, fresh, best pieces,	"		10
whole hogs,	"	6	7
VEAL,	"	6	8
MUTTON,	"	4	10
POULTRY,	"	10	11
BUTTER, keg and tub,	"	12	14
Lump, best,	"	10	20
EGGS,	dozen.	10	14
MEAL, Rye, retail,	bushel.		80
Indian, retail,	"		75
POTATOS,	"	37	40
CIDER, [according to quality,]	barrel.	2 00	2 50

MISCELLANIES.

THE DEITY.

Not in the solitude
Alone may man commune with heaven, or see,
Only in savage wood
And sunny vale, the present Deity;
Or only hear his voice
Where the winds whisper and the waves rejoice.

Even here I do behold
Thy steps, Almighty!--here, amidst the crowd
Through the great city rolled
With everlasting murmur, deep and loud,
Choking the ways that wind
'Mongst the proud piles, the work of human kind,

The golden sunshine comes
From the round heaven, and on their dwelling lies,
And lights their inner homes;
For them thou fill'st with air the unbounded skies,
And givest them the stores
Of ocean, and the harvest of its shores.

Thy spirit is around,
Quickening the restless mass that sweep along;
And this eternal sound,
Voices and footfalls of the numberless throng,
Like the resounding sea,
Or like the rainy tempest, speaks of Thee.

And when the hours of rest
Come, like a calm upon the mid sea brine,
Hushing its billowy breast,
The quiet of that moment too is thine;
It breaths of Him who keeps
The vast and helpless city while it sleeps.

As Sir Walter Scott was riding (a few weeks ago) with a friend in the neighborhood of Abbotsford, he came to a field gate, which an Irish beggar, who happened to be near, hastened to open for him. Sir Walter was desirous of rewarding the civility by the present of sixpence, but found that he had not so small a coin in his purse. "Here, my good fellow," said the Baronet, "here is a shilling for you; but mind, you owe me sixpence." "God bless your Honor!" exclaimed Pat, "may your Honor live till I pay you!"—*Literary Gaz.*

An Englishman's account of New England Farmers.—The whole country, (New-England, United States,) are going mad about manufactures, and water powers and water privileges. New England, however, does seem to be admirably fitted for a manufacturing, and not for an agricultural nation. There is not much improvement in husbandry here, though the people have a strange look of property and comfort, and all the rocks, and rivers, and woods, of New England, are swarming with healthy and happy children. How they are fed, God only knows; for not a thousandth part of the soil is properly cultivated, and it is a very difficult thing for a farmer to sell enough from what is raised on his farm, or in his dairy or poultry yard, to pay his yearly taxes, which are little or nothing. And yet no one ever saw, or heard of, so happy a people. They are crowded with children—well educated, well clothed healthy children—with enough to eat and drink, with a horse or two for every farm, a few cows, a few sheep, a few pigs, plenty of poultry, and two or three yoke of fine cattle; and so happy are they, and so far from feeling poor, that, in nine families out of ten, they would think no more of adopting a stray child that might come in their way, than most people would of giving it a dinner. Wages on a farm are one dollar (4s. 6d.) a day, or 12 dollars a month the whole year round (2*l.* 14s.) or 120 dollars per year (32*l.* 2s.) In all these cases the laborer is found. In the haying season he may earn one dollar and fifty cents, or 6s. 9d. a day.—*Notes of a Tour through New-England in* 1822.

Mode of travelling in Russia.—As soon as winter sets in, that is, as soon as the sea which is now agitated by the slightest wind, becomes a solid mass, the road is marked out on the ice which leads from Petersburgh to Kronstadt; this is done by a line of large buoys. About every league are stationed six sentry boxes, well armed, and the centinels, during foggy weather, keep up fires at certain distances, and, by the tinkling of bells, serve as a security and guide to the traveller.—About half way is established a restaurateur. The innumerable crowds of people, of all ages and both sexes enveloped in their large pelisses, and gliding with indifference upon the fragile surface, which alone separates them from the abyss beneath, offer to the inhabitants of a southern country a strange sight, and impress him with a feeling of terror quite unknown to a northern people. But it is when they begin to run the *bouers*, that the road to Kronstadt presents the most animated picture. These bouers are boats fixed on two plates or blades of iron like skates, with a third which is adapted like a rudder. Seats are arranged round this hack, which has one, two, or sometimes three masts. Driven before a wind which always blows with violence during this season, and directed by an able pilot, these boats, distinguished by their variety of rigging and flags of different colours, skim along the surface with inconceivable rapidity. A pale sun lends its rays to the scene, but imparts no heat; the sails are unfurled; the north wind whistles; the boat darts forward; and the sailors, by skillful manœuvres, endeavor to pass each other; and thus, in less than an hour, you glide through a space of ten leagues.—*Ancelot's Travels in Russia, in* 1820.

An English merchant, established at Hammersfelt, has founded a colony of 25 Laplanders and other Northern Europeans, at Spitzbergen, to collect furs. The brother of the undertaker is at the head of the establishment. They have convenient houses; the climate is very healthy, and not too cold to prevent hunting; no one has been sick for the three years that the colony has existed.—Every year a ship brings provisions and takes away the furs.

Never make an enemy, or lose a friend, unnecessarily.

Fruit Trees.

WILLIAM PRINCE, the Proprietor of the Linnæan Botanic Garden and Nurseries at Flushing, Long Island, has the pleasure of informing the public, that his Nursery now contains 172 varieties of the Apple—2 2 do. of the Pears—76 do. of Cherries—139 do. of Plums—25 do. of Apricots—84 do. of Peaches—2 do. of Nectarines—1 do. of Almonds—14 do. of Mulberries—6 do. of Quinces—16 do. of Figs—16 do. of Currants—15 do. of Raspberries—47 do of Gooseberries—2 do. of Strawberries—257 do. of Grapes—6 do. of Ornamental Trees, &c. Above 5 of the above kinds of Fruit are not to be found in any other collection in America. The different varieties cannot be otherwise than genuine, as the greatest attention is paid, and nearly all the kinds are inoculated from bearing trees. The Cherry, Peach, and other Trees, are generally of a large size. Catalogues may be obtained of J. R. Newell, at the Agricultural Warehouse, 52 North Market street, gratis; and orders left there, or sent by mail, will meet prompt attention.

March 14

ESTABLISHMENT FOR SEEDS.

For sale at the Seed Establishment, connected with the office of the New England Farmer, No. 52 North Market Street, Boston, the largest variety of Seeds to be found in New England—of the crops of 1827. The greatest care has been taken to have them raised by our most experienced seed growers, and to have the sorts perfectly genuine. The following comprises some of our most prominent sorts.

Artichoke, Green Globe
Asparagus, Devonshire
Gravesend
Battersea
Large white Reading
Beans, (26 varieties,) including the English broad beans, dwarfs and pole.
Beets, true Long Blood
Early blood Turnip
Early White Scarcity
French Sugar, or Amber
Orange
Green, (for soups, &c.)
Borecole
Brocoli, Early White
Early Purple
Large Cape
Brussells Sprouts,
Cabbage, Early Salsbury dwarf
Early York
Early Dutch
Early Sugarloaf
Early Lon. Battersea
Early Emperor
Early Wellington
Large Bergen. &c.
Large Cape Savoy
Large Scotch
Large Green glazed
Large late Drumhead
Tree, or 1000 headed
Green Globe Savoy
Red Dutch
Yellow Savoy
Turnip rooted, &c.
Russian
Late Imperial
Late Sugarloaf
Cardoon.
Carrots, Altringham
Early Horn
Blood Red(for West India market)
Lemon
Long Orange
Cremer
Cauliflower, Early and Late
Celery, White solid
Rose coloured solid
Italian
Celeriac, or turnip rooted
Chervil.
Chives.
Corn Salad, or Vettikost
Cress, Curled or Peppergrass
Broad leaved or Garden
Water
Long Orange
Cucumber, Early Frame
Green Cluster
Short Prickly
Long Prickly
Long green Turkey
Long white Turkey
White Spined
Small Girkin, &c.
Egg Plant, Purple
White
Endive, Green
White Curled
broad leaved Batavian
Garden Burnet
Garlic Setts
Indian Corn, (several varieties)
Kale, Sea
Purple curled
Green curly Scotch
Leek. London
Large Scotch
Lettuce, Early Curled Silesia
Large Green head
Royal Cape
Imperial
Hardy Green
Brown Dutch
Grand Admiral
Tennisball, or Rose
Drumhead
Magnum Bonum Coss
Bath Coss
Ice Coss
White Coss, or Loaf,
Green Coss
Melon, Pine Apple
Green Citron
Persian
Nutmeg
Large Canteleupe
Pomegranate, or Musk
Carolina Water
Long Island Water
Apple-seeded, Water
Marjoram,
Mustard, White and Brown
Nasturtium
Mangel Wurtzel,
Okra
Onion, Potatoe
Tree
White Portugal
Yellow
Madeira
Stratsburg
Large Red
Parsley, Siberian
Dwarf Curled
Curled, or Double
Parsnip, Large Dutch swelling
Silver Skinned
Peas, Early Washington
Early double blossomed
Early Frame
Early Golden Hotspur
Early Charlton
Early Strawberry Dwarf
Dwarf blue Imperial
Dwarf blue Prussian
Dwarf Spanish, or Fan
Dwarf Marrowfat
Dwarf Sugar
Matchless, or Tall Marrow
Knight's Tall Marrows
Tall Crooked pod Sugar
Peppers, Long, or Cayenne
Tomato, or Squash
Bell
Cherry
Pumpkins, Finest Family
Connecticut Field
Mammoth
Radish, Early Frame
Short top Scarlet
Long Salmon
Purple Short Top
Long white, or Naples
Cherry
Violet colored
White Turnip Rooted
Black Fall, or Spanish
Rhubarb, for tarts, &c.
Ruta Baga,
Salsafy, or vegetable oyster
Sea Kale,
Skirret
Scorzonera
Saffron,
Spinach, New Zealand
Prickly, or Fall
Roundleaved summer
Eng. Patience Dock
Sage,
Squash, Early bush Summer
Long Crook Neck
Vegetable Marrow
Porter's Valparaiso
Acorn
Tomatos
Turnips, Early White Dutch
Early Garden Stone
White Flat, or Globe
Green Round
Red Round
Swan's Egg
Large Eng. Norfolk
Long Tankard
Long Yellow French
Yellow Dutch
Yellow Maltese
Yellow Aberdeen
Yellow Stone
Yellow Swedish
Dedham
Thyme—Sweet Basil—Bonesat, Lavender—Rosemary—Hyssop, Wormwood—Summer Savory, Penny royal—Spikenard—Dill, Balm—Tansy—Bene, &c.